



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE GENUS ANGELINA Fr.

ELIAS J. DURAND.

The genus *Angelina* was established by Fries in 1849 to include a single species, the *Ascobolus conglomeratus* of Schweinitz. The original description of the genus indicated a plant with gelatinous ascomata, which became horny and closed in a hysteriiform manner when dry, the disk becoming papillate from the protruding asci. Schweinitz had already remarked the resemblance of this species to his own *Hysterium rufescens*, and Duby, concluding that the two species were identical, reverted to the older name, so that the species has since passed under his combination as *A. rufescens* (Schw.) Duby. The same author quoted Fries to the effect that after an examination of two authentic specimens of *H. rufescens* in the herbarium of the Museum of Paris, he had concluded that one was simply an older stage of the other, and that it was this older condition which Schweinitz had called *Ascobolus conglomeratus*. This species he had already recognized as approaching more nearly to the Discomycetes than to the Pyrenomycetes.

Schweinitz had originally described the plant as an *Hysterium* because in the dried condition the margins were inrolled or approximated in an hysteriiform manner. In his later description the supposedly different species was referred to *Ascobolus* because the disk appeared black-papillate from the protruding asci. Duby remarked correctly that Fries had exaggerated the gelatinous nature of the moist plant, but incorrectly, as I think, placed the genus in the Hysteriineae. Boudier doubtfully included *Angelina* in the Ascobolaceae, while Saccardo and Ellis and Everhart placed it in the Hysteriaceae. Lindau puts it in the Hysteriineae, family Hypodermataceae.

I have recently had the opportunity of examining the types in the herbarium of Schweinitz, as well as of studying material in the perfectly fresh natural condition, in the vicinity of Ithaca. The following conclusions are based on these specimens. Schweinitz possessed several specimens marked "*Ascobolus conglomeratus*." Some one has separated these into two groups based on the color. In the first group the ascomata are crowded, elongated and variously bent and curved. The dry disk is widely exposed, and dark chestnut-brown. The exterior is the same color, but the margin is pale yellowish brown, the contrast being quite strongly marked. In the second group the ascomata are similar in habit, form and color, but the margins are not perceptibly paler. The structural characters are identical in the two groups. The type of *Hysterium rufescens* is in color intermediate between the two. Its structural characters agree

in every respect with those of *Ascobolus conglomeratus*. In my own recent collections all the above variations in the color of the margin are shown in a single patch. In the fresh specimens the substance is rather a fleshy-waxy, not at all gelatinous. The disk is widely exposed, and the asci do not project above the hymenium. It is rather difficult to see how the disk could become black-punctate from projecting asci when both they and the spores are hyaline. A section shows that the paraphyses cohere above the asci forming an epithecium.

On the basis of the above characters I think the genus *Angelina* should be located in the Pezizineae, family Cenangiaceae, where its spore characters place it near *Cenangella*.

I add a description and synonymy:

ANGELINA Fr., Summa Veg. Scand. p. 358. 1849.

A genus of the Cenangiaceae. Ascomata erumpent-superficial, sessile, without a stroma; when fresh fleshy-waxy, disk exposed, elongated, curved or sinuous, when dry rather horny, inrolled in an hysteriiform manner. Asci 8-spored. Spores 1-septate, hyaline. Paraphyses slender, flexuous.

Angelina rufescens (Schw.) Duby, Mem. Soc. Phys. Hist. nat. Gen. 16:51. 1861.

Hysterium rufescens Schw., Syn. Fung. Car. no. 252. p. 50. 1822.

Ascobolus conglomeratus Schw., Syn. Fung. Am. no. 960. p. 178.

1831.

Angelina conglomerata (Schw.) Fr., Summa Veg. Scand. p. 358.

1849.

Exsic.: Ellis, N. A. F. no. 466.

Ascomata usually densely gregarious, erumpent-superficial, sessile, when fresh elliptical or elongated and variously curved and sinuous, disk widely exposed, slate-gray, externally brown and grumous, margin paler, rather thick, about .75 mm. wide, 1-3 mm. long; when dry hysteriiform, disk and exterior reddish-brown, the margin usually paler or yellowish. Excipulum minutely parenchymatous, brown. Asci conspicuously narrowed below to a slender pedicel the ascigerous portion narrowly elliptical or lanceolate, apex rounded, not blue with iodine, 90-110 x 4-8 μ . Spores 8, biseriate in the upper part of the ascus, fusoid-oblong or clavate-oblong, ends rounded, hyaline, smooth, for a long time continuous, finally 1-septate, not constricted, 8-15 x 3-4 μ . Paraphyses very slender, branched, curved and flexuous, slightly thickened at the apices which cohere to form the epithecium.

On much decayed wood, especially on the tops of rotten oak and chestnut stumps. Spring and Autumn.

New England (Curtis); New York (various collectors); New Jersey (Ellis); Pennsylvania (Schweinitz); N. Carolina (Curtis and Schweinitz); S. Carolina (Ravenel).

Excluded species. *Angelina nigro-cinnabarina* (Schw.) B. & C., Jour. Linn. Soc. 10:373, and *A. lepieurii* Mont., Syll. p. 188, also Jour. Linn. Soc. 10:372, belong to the genus *Trybliella*.

Botanical Laboratory, Cornell University.